

Book Review | *Science in a Democratic Society*

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Published online: 31 January 2013

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***Science in a Democratic Society*. Philip Kitcher. Amherst, NY: Prometheus Books, 2011. 270 pp. ISBN 978-1-61612-407-4.**

Reading a good book should make you feel you are in conversation with the author, carried on from point to point by explanation and illustration until the last page signals its conclusion. Philip Kitcher's *Science in a Democratic Society* began in such a fashion, but increasingly made me feel as though we were on moving sidewalks heading in divergent directions.

In setting up the problem, Kitcher succinctly and correctly depicts how scientific authority has been eroded in Western democracies, with special focus on the United States. He then locates the main reason for this erosion in popular misconceptions about the role played by values in science, instead urging the importance of ethics in relating the two within the framework supplied by democratic society. Moving forward to the key values in such a society, he outlines the issues surrounding freedom in relation to epistemology – whether one can have personal, democratic epistemic freedom within a context that allows for decisions about scientific knowledge that, by nature, are expressions of social authority. He then characterizes the nature of public knowledge in a democracy, how it has developed over time and how such knowledge relates to the norms of scientific enquiry and epistemic freedom.

All these themes bring the reader through to the end of the fourth chapter. My interest in Kitcher's ideas and analysis was coupled with increasing disquiet, as I began to realize that the implied praxis of his initial chapters drew him instead toward an idealist representation of Science that renders his earlier discussion of ethics (as “social technology”) literally immaterial. Chapters Five through Eight then unpack different aspects of this idealist representation of Science in a democracy. The ninth and final chapter is a series of

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examples of how choices have been (or should be made) with respect to the science behind “the history of life”; “biomedical technology”; genetically modified organisms”; and “climate change.”

While Kitcher has interesting things to say about idealist Science in the context of democratic society, my initial enthusiasm with the definition of his project was replaced with frustration that we were shouting at each other across the divide created by those sidewalks moving in divergent directions. The concluding chapter was the least satisfying of the whole book, as his “answers” to the problems of scientific authority represented by these four issues were not answers at all, nor (even as responses) did they dig beneath the surface of the obvious. Nor, as you can tell by the structure of the book itself, was there any clear link established between these four examples and the idealist depiction of Science in the preceding four chapters. The first half of the book thus seemed like a sketch of one volume, while the second half the sketch of another. (That Kitcher alluded to the synopsis of his other current publication, on ethics, as the foundation for some of the material in the earlier chapters made me wonder if this present book was initially intended to be part of a larger work.)

There are many nice, succinct turns-of-phrase that set out his analysis in a clear and forthright manner. He observes that “skepticism about scientific authority has not grown because postmodernism has been injected into the drinking water” (16) and is sharply critical of the grandiose misrepresentations, on all sides, of what we have learned through Science. “*Scientism* ... abounds, and its excesses stimulate reactions that detract from the credibility of more sober scientific judgments” (17), with the result that “the gap between promise and performance is larger still, and yet more likely to endure” (18). “Grand theories of nature-in-general, or of human nature, not only produce reactions of disappointment when they fail to live up to their advance billing, but they also contribute to a picture of science as an alienating institution” that is more about the exercise of Power than the discovery of Truth: “For people who already worry about the judgments issuing from particular fields of research, ventures in scientific imperialism easily provoke discomfort with Science, as a whole” (18).

Similarly, I enjoyed his caricature of Enlightenment science, part of whose legacy “consists in celebrating the freedom of scientific research from judgments of value: supposedly, there are value-neutral ways of evaluating evidence and coming to scientific conclusions” (19). The problem today, of course, is that there is “an alternative story” in which “Institutionalized Science is dominated with people with biases that oppose the ideas of the folk. Behind the elite universities and honorary societies is a subversive agenda, one intent on rooting out popular convictions and values” (19).

Kitcher identifies two options with respect to the public interactions of Science and Democracy. In the first, “citizens are entitled to their own opinions across the board. Responsible participation in public affairs requires nothing further than making up your own mind, as you see fit” (20). He calls this “the commitment to epistemic equality” (20).

In the second, he favors the idea of a “division of epistemic labor,” wherein that democratic right is transferred to those experts who have the specialized knowledge to enable the making of more appropriate decisions (21). Taking as an exemplar Plato’s idea of the *kallipolis*, Kitcher asks “As things stand, have extant democracies achieved a satisfactory division of epistemic labor, one that combines with social procedures to enable citizens to realize the goals democracy advertises as its own special virtue?” (25).

The short answer would be “no” – but while the rest of Kitcher’s book is devoted to explaining why this would be the answer, he is surprisingly skittish about simply stating the point. The sidewalks begin to diverge for me, as a result, because while the question is a crucial one, his answer becomes increasingly elliptical as the argument unfolds.

The most obvious and crucial problem today, one with the most serious implications for the future of the planet, is the debate over climate change. He asks his reader to “postpone, for the moment, the overridingly important debates about how our species should respond to the warnings of climate change scientists, and focus on an example – far less significant except for its symbolic role – on which much ink has been spilled” and then proceeds to spill more ink on creationism. The subject of climate change is not addressed in any significant way until the last chapter, as the last topic out of four, and he contributes little of value to the public discussion about it.

What he describes as “the division of epistemic labor” is a useful analytical tool, but in a democratic context, he needs to consider that whatever degree of assent I might give to expert opinion, or however much I defer to those with knowledge in other fields, there is still a point when I choose myself what to do about it. Referring to ethics as a “social technology” is good way to begin, but Kitcher does not develop this idea any further. The presumption that in a democratic society the average citizen can (or will ever) make responsible choices based on the rational assessment of scientific evidence is breathtakingly external to any historical context I can imagine. We all choose, individually and collectively, but for reasons Kitcher does not discuss in a substantive fashion; he eschews practical prescriptions for decision-making about science in democratic society and ruminates on the problem instead.

No practical analysis can emerge from a sub-heading like “Chimeric Epistemologies and Opaque Value-Judgment” (155), for example. And while I agree that “the best solution to the problems of democracy is more democracy” (185), it is not at all clear that more public education about science would have a material effect on those chimerical ideas about Science that mute the voice of reason in the public square.

Science in a Democratic Society thus poses more questions about the relationship between science and democracy than I find it answers. If there is a division of epistemic labor, which I think there is, to what extent are we expected (or even bound) to accept the conclusions offered by the experts? In a dual of competing experts, whom then should we believe – if anyone? (As he amusingly puts it, “Newton’s third law applies: to each scientist judging a controversy, there is an equal and opposite scientist” (19).) Yet is the value-free rational assessment of evidence by scientific professionals still part of the social narrative of Science – notwithstanding all other historical, social and cultural evidence to the contrary? If the scientific method is the root myth of Western scientific culture (as I would contend), how can we discussion science and democracy without considering the context provided by the interpretation of such narratives in the public square?

For me, the divergence of moving sidewalks begins with Kitcher’s effort to decontextualize science and democracy. It is not a subject able to be confined to the realm of philosophical abstraction. To take the strong position, democracy is boots-on-the-ground philosophy, applied in context, or there is no social value whatsoever to its theoretical discussion. Perhaps I expose both my character flaws as historian and social scientist in making such a statement, but the enthusiasm I felt for Kitcher’s analysis of predicaments of Science in democratic culture in the first few chapters waned as he shied away from anything resembling a prescriptive response. When you set as your goal the discussion of Science in the public square, in the midst of the intellectual hurly-burly of Democracy, you cannot then retreat to your garret and contemplate the whichness of the why. For my part, the division of epistemic labor compels Kitcher (as an expert) to offer something more, as a way out of the quagmire of public perceptions of Science, but instead he moves off into the philosophical aether. Brought back to earth in the last chapter (entitled “Actual Choices” – perhaps by some editor or reviewer?), the analysis of the four issues presented is thin and his prescriptions anemic.

Granted, it is not fair to pillory an author for not doing what he had no intention to do. Yet, given the book’s title, the opening salvos about science in democratic society and his initial urging to set aside “for now” how this might relate to the “overridingly important” issue of what to do about climate change, Kitcher should have delivered more than he did.

Science in a Democratic Society is most interesting as a prologue to the important work Philip Kitcher could now write. His next book should lay out what must be done to mobilize citizens in a democratic response to the problems of sustainability in the 21st century – a response that is neither hijacked by credulity nor undermined by the inanity of denial.